Process: To Be PU-01 Requisition Purchasing File: Sub-Process: PU-01 Requisition **Date**: 10/21/05 Project Edison - State of Tennessee Page: 1/1 Prepared by: -No-Send Request to Prepare **End User** Dept. Supervisor Need for Goods, Request Requisitionier (hard copy) Approval? Services, or Contract Identified No-Receive & Review Purchasing Search Local Catalogs Requisitioner Request "Punch Out" to Vendor Web Sites Enforced User Defined Sourcing Rules Enter Request Accurate Yes-→ Requisition and Complete? PU-02 Cancel Agency Procurement Requisition Solicitation No Νo PU-03 Retrieve Central Pre-Approved? -Yes

→ Requisition from Procurement established Award System Requisition? source? Document Procurement Central Retrieve PU-02 Requisition from Central Solicitation Procurement Mailbox Edison Requisition Entered Generate Pre-Encumbrance Approval Path Established



Process Name: Purchasing	Process Identifier: PU
Sub-Process Name: Requisition	Sub-Process Identifier: PU-01

**Sub-Process Purpose and Objectives:** To generate an approved request to procure goods and/or services, or to establish a source of supply for goods and services (i.e., term contract).

**Sub-Process Description:** End User identifies a need for goods and/or services, and prepares a purchase request that is submitted to a supervisor for approval. If approved, the supervisor forwards the purchase request to the Department's Requisitioner. The Requisitioner reviews the request and, if accurate, enters it into the Edison Procurement module. The Requisitioner, depending on security profiles, will use pre-established electronic catalogs of contracted goods and services. To streamline the request process, the requisitioner can "search" various catalogs based on commodity code, manufacturer, description or other identifier. The requisitioner can also "punch out" to various manufacturers' websites with which the State has established buying agreements, configure their request, add the goods and/or services to a shopping cart, and pull that information back into the requisition. Once the requisition is entered, Edison pre-encumbers funds and generates any necessary approval paths. Approvers can be electronically notified of pending approval requests. This workflow is automatically generated based on rules the State establishes.

If routed to Agency Procurement, the requisition is retrieved from the system and, in accordance with pre-established edits/sourcing rules, Agency Procurement may proceed with generating an award document or route the requisition to Central Procurement. Requisitions received by Central Procurement are retrieved from the system and processed as solicitations.

## **Sub-Process Trigger(s):**

• This process is triggered by an End User identifying a need to procure goods and/or services.

## **Key Sub-Process Participants:**

- End User
- Requisitioner
- Agency Procurement
- Central Procurement

Inputs:

Input	Format	Volume/Time	Suppliers
Paper document of request Requisitions	Paper Electronic	Approximately 50,000 Approximately 50,000	End User Agency Procurement
Outputs:			
Output	Format	Volume/Time	Recipients



Process Name: Purch	asing	Process Identifier: PU	
Sub-Process Name: F	Requisition	Sub-Process Identifier: PU	J-01
Requisitions Solicitations	Electronic Electronic	Approximately 50,000 Approximately 20,000	Agency Procurement Central Procurement
Performance Measure	es Tracked:	-	-
	Measure	Current Value	Target Value



Change Required (Yes/No)?
\ /
TBD

### **Key Assumptions:**

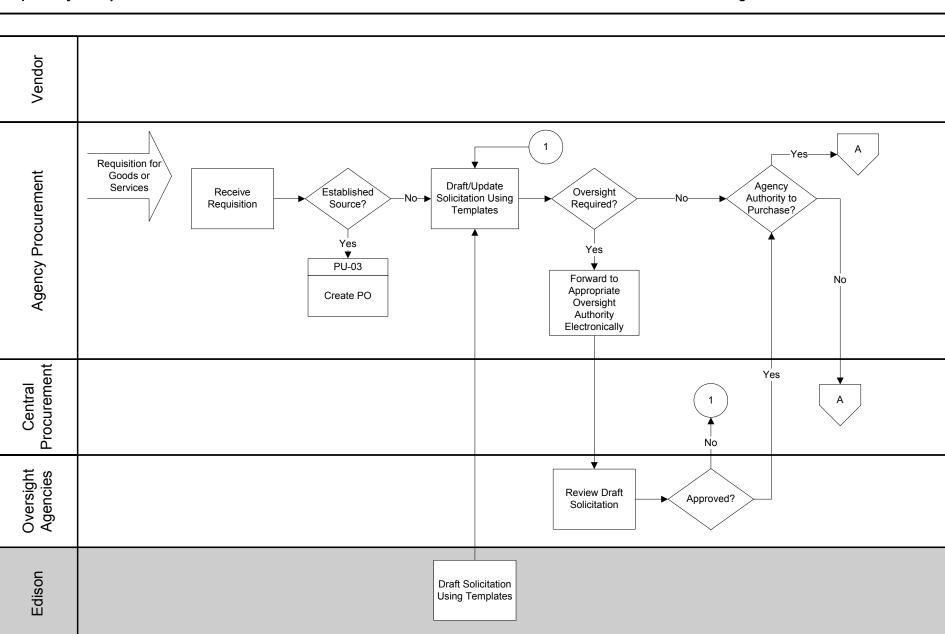
- The system will provide Agency Procurement the ability to create an award document at the requisition stage based on preestablished edits/sourcing rules.
- The system will automatically route the requisition to Central Purchasing as required.
- The system will create pre-encumbrance and approval paths for Agency Procurement
- The system will provide coding options for Agency Procurement to activate/deactivate specific fields.

### Improvements:

- The system will provide standardize Procurement; i.e., provide Requisitioner a single point of entry for request for goods and /or services.
- Increase the ability to automate workflow and approval process.
- Reduce maverick spending through the use of system rules and pre-established catalogs.
- Provide Vendor on-line catalogs to Agency Procurement.
- Increase savings via better controls on "maverick" buying.

Change Management Concerns:	Communication Actions:	
<ul> <li>Agency accountability</li> </ul>	<ul> <li>Extensive training</li> </ul>	
<ul> <li>Staffing</li> </ul>		
Eliminated Non-Core Systems:		
•		
•		

Process:PurchasingFile:To Be PU-02 SolicitationSub-Process:PU-02 SolicitationDate:10/21/05Prepared by:Project Edison - State of TennesseePage:1/2

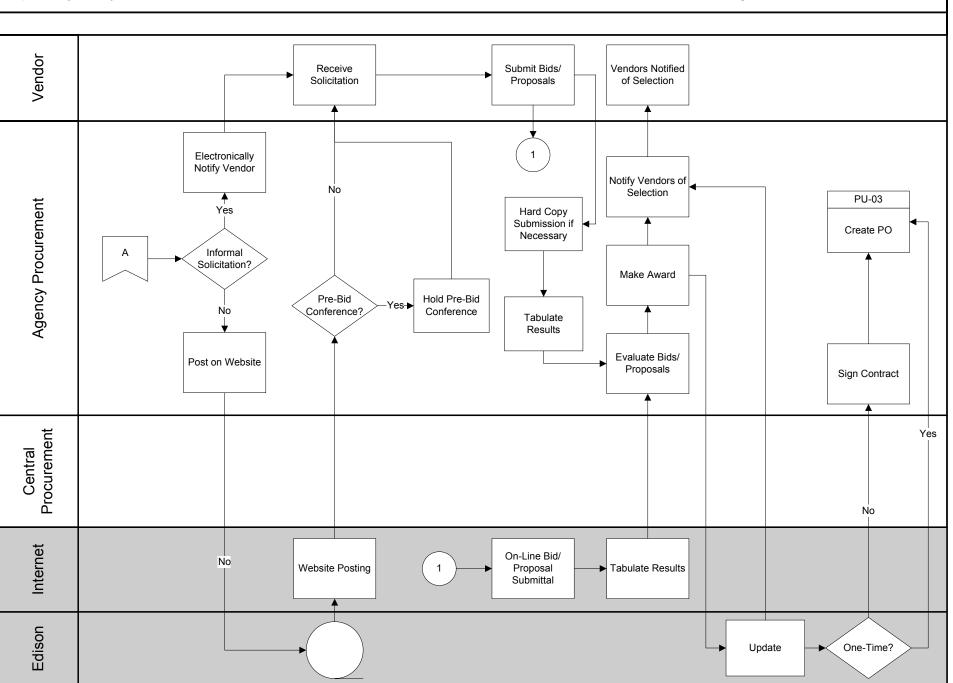


Process: Purchasing File: To Be PU-02 Solicitation

Sub-Process: PU-02 Solicitation

Date: 10/21/05

Prepared by: Project Edison - State of Tennessee Page: 2/2





Process Name: Purchasing	Process Identifier: PU
Sub-Process Name: Solicitation	Sub-Process Identifier: PU-02

**Sub-Process Purpose and Objectives:** To create a solicitation from a requisition, or direct procurement from a master agreement-sourcing request for the purpose of procuring goods and/or services from outside vendors; or to establish a purchasing contract for an established term.

Sub-Process Description: Agency Procurement receives requisition for goods and/or services from the authorized Department/Division Requisitioner. Based on defined business rules, Edison will transmit the requisition to the appropriate procurement official based on attributes such as commodity code, object of expense, or dollar amount. The Agency Procurement official accesses the requisition from e-mail notification to his/her mailbox. Agency Procurement official then reviews the requisition for determination of existing source. If goods and/or services are available from an established source, Agency Procurement proceeds with creating a P.O. If there is no pre-established source, Agency Procurement prepares a "draft" solicitation using system generated (Edison) shells and data pulled over from the requisition, if desired. Electronic word processing or spreadsheet documents may also be attached. The solicitation is then electronically routed to the appropriate Oversight Agency or authority for review and approval. Once approved, the Oversight agency/authority electronically sends the solicitation back to Agency Procurement for determination if Agency Procurement has the authority to procure. If yes, Agency Procurement determines if the procurement method is informal or formal.

If informal, Agency Procurement sends the solicitation to appropriate number of vendors who return their on-line bid/proposal. Once bids are received, the system-tabulated results are forwarded to Agency Procurement for evaluation and award.

If formal, Agency Procurement posts to the solicitation to appropriate Websites where vendors may view the solicitation and submit on-line bids/proposals. After bids are opened the system electronically tabulates and routes the results to Agency Procurement for evaluation. Based on evaluation criteria, Agency Procurement proceeds with an award, notifies the vendors of selection, creates an award document, which is signed and sent to the successful vendor.

If Agency Procurement does not have predefined purchasing authority, the solicitation is sent to Central Procurement. Central Procurement follows the same process as Agency Procurement for processing informal and formal solicitations.



Process Name: Purchasing		Process Identifier: PU		
Sub-Process Name: Solicitation	Sub-Process Name: Solicitation		Sub-Process Identifier: PU-02	
Sub-Process Trigger(s):  • This process is triggered by the receipt of a requisition.		Key Sub-Process Participants:		
Inputs:				
Input	Format	Volume/Time	Suppliers	
Solicitations	Electronic	Approximately 50,000 Approximately 50,000	Agency Procurement Oversight Agency Central Procurement Vendors	
Outputs:				
Output	Format	Volume/Time	Recipients	
Solicitations	Electronic	Approximately 50,000	Agency Procurement Central Procurement Oversight Agency Vendors	
Performance Measures Tracket	ed:		_	
Mea	sure	Current Value	Target Value	



Law, Policy, or Statute Site That Govern Sub-Process:		
Law, Policy, or Statute	Change Required (Yes/No)?	
T.C.A. Title 4, Chapter 3, Section 4-3-1101 to 4-3-1113	TBD	
T.C.A. Title 4, Chapter 3, Section 12-3-101 to 12-3-1103		
T.C.A. Title 4, Chapter 3, Section 12-4-106 to 12-4-119		

# **Key Assumptions:**

- All executive branch agencies will utilize Edison for procurement of goods and/or services.
- The system will standardize the procurement process by streamlining and/or modifying numerous existing processes.
- The system will enable Agencies to buy goods and services electronically.
- The system will expedite the delivery time of goods and services.
- Agencies will have more control and accountability for procuring goods and/or services.
- Buying power will be leveraged, producing lower costs.
- The system will provide more accurate data of buying history



#### Improvements:

- Reduce prices paid for goods and/ or services through increased competition for the State's business as a result of a volume buying.
- Provides ability to "punch out" to vendor websites to requisitioner to configure and price items saving the procurement official time.
- Registered suppliers can be set up to automatically receive notice of opportunities.
- Provide method for receipt of electronic bids/proposals.
- Increase savings via better controls on "maverick" buying.
- Provide ability to create solicitations from requisitions
- View entire document on line; e.g., specifications, terms and conditions.
- Provide procurement templates for Agency use.
- Provide dynamic workflow capabilities to route solicitations for approval.
- Post solicitations electronically making them accessible on the Internet
- Provide capability to tabulate vendor responses.

### **Change Management Concerns:**

- Standardization of Procurement Methods
- Empowering Agencies to procure goods and services

#### **Communication Actions:**

- Explaining benefits of ERP
- Continued training of agency personnel

### **Eliminated Non-Core Systems:**

• TOPS

Purchasing Process: File: To Be PU-03 Create PO Sub-Process: PU-03 Create Purchase Order **Date:** 10/21/05 Prepared By: Project Edison - State of Tennessee **Page:** 1/1 Vendor Fill Customer Receive Purchase Order, Goods or Order Services Agency Procurement Official PU-01 Create Requisition PU-04 Create Purchase Print PO for FAX Retrieve Order From or Mail or Requisition or Requisition or Solicitation from Distribute Receipt Solicitation, Route Electronically Mailbox to Fiscal PU-02 Create Solicitation Agency Fiscal Validate Accounting Distribution, Make Corrections if Necessary Update edision, Edision Pre-Encumbrance Requisition or Purchase Order Liquidated, Solicitation Data Encumbrance Created



Process Name: Purchasing	Process Identifier: PU
Sub-Process Name: Create Purchase Order	Sub-Process Identifier: PU-03

**Sub-Process Purpose and Objectives:** To create, distribute, and issue a purchase order, or to create and distribute a contract from a solicitation.

**Sub-Process Description:** A buyer, either at the agency level, or central procurement, will receive a notice of a Request for Purchase. This notice will be either a requisition or solicitation request. To create the award, the buyer selects the vendor and line items to be awarded from evaluation results. Data from the requisition, solicitation and solicitation responses are used to generate the PO lines, as well as information provided by the buyer. Best practice includes the use of catalogs (both internal and external) for established sources, reverse auctions or the use of a traditional bid process. Internal catalogs may include catalogs within the State's firewall developed from suppliers on State term contracts. External catalogs may include catalogs outside the State's firewall that Requesters can "punch-out" to. Buyers can create different types of orders, including blanket purchase orders (contracts, term contracts, catalogs) or can create releases against such documents previously established.

After a vendor and a source have been selected, the PO will be routed to the Fiscal Office to validate the accounting entries. After approval by Fiscal, any pre-encumbrances will be liquidated and an encumbrance will be created. The PO can also be electronically routed through a system-generated workflow to other oversight entities where additional approvals are required.

#### **Sub-Process Trigger(s):**

• This process is triggered by the receipt of a requisition or a solicitation.

#### **Key Sub-Process Participants:**

- Agency Procurement
- Central Procurement
- Vendor
- Fiscal Office

#### Inputs:

mpater			
Input	Format	Volume/Time	Suppliers
Solicitations	Electronic	Approximately 50,000/Year	Agency Procurement
Requisitions	Electronic	Approximately 100,000/Year	Oversight Agency
RFP	Electronic	Approximately 300/Year	Central Procurement
Request for Leases	Electronic	Approximately 200/Year	
Request for Construction	Electronic	Approximately 15/Year	
Outputs:			
Output	Format	Volume/Time	Recipients



Process Name: Purchasing		Process Identifier: PU	
Sub-Process Name: Create	Purchase Order	Sub-Process Identifier: PU-03	3
PO Contracts Professional Services Contracts Signed Leases Construction Contracts	Electronic Electronic/Paper Electronic/Paper Electronic/Paper Electronic/Paper	Approximately 115,000/Year Approximately 35,000/Year Approximately 300/Year Approximately 200/Year Approximately 15/Year	Agency Procurement Central Procurement Oversight Agency Vendors
Performance Measures Tra	acked:		
	Measure	Current Value	Target Value



Law, Policy, or Statute Site That Govern Sub-Process:		
Law, Policy, or Statute	Change Required (Yes/No)?	
T.C.A. Title 4, Chapter 3, Section 4-3-1101 to 4-3-1113	TBD	
T.C.A. Title 4, Chapter 3, Section 12-3-101 to 12-3-1103		
T.C.A. Title 4, Chapter 3, Section 12-4-106 to 12-4-119		

# **Key Assumptions:**

- All executive branch agencies will utilize Edison for procurements, both goods and services.
- The system will standardize the procurement process by streamlining and/or modifying existing processes.
- The system will enable Agencies to buy goods and services electronically.
- The system will expedite the delivery time of goods and services.
- Agencies will have more control and accountability for procuring goods and/or services.
- Buying power will be leveraged, producing lower costs.
- Produces more accurate data of buying history
- The system will provide for either Two or Three-way Match (Req. to Check)



#### Improvements:

- The system will standardize all existing procurement methods for goods and services.
- Reduce prices paid for goods and/or services through increased competition for the State's business as a result of a volume buying.
- Provides the Requisitioner and/or Procurement Official the ability to "punch out" to vendor websites to configure and price items saving the procurement official time.
- Increase savings via better controls on "maverick" buying.
- Ability to easily combine requisition line items into a PO or splitting requisitions to multiple PO's.
- View entire document on line; e.g., specifications, terms and conditions.
- Provide procurement shells for Agency use.
- Provide dynamic workflow capabilities to route purchase orders for approval when required.
- Implement the ability to send purchase orders directly to the receiving vendor's system (i.e., no manual entry on the vendor's part)
- Implement the ability to post award information on the web directly from the purchasing application
- Increased vendor access to bid opportunities through the use of "push" technology to notify vendors of bid opportunities (based on the commodities they are registered to provide) through industry-standard email applications.
- Reduced prices paid for goods and services through increased competition for the State's business as a result of a more dynamic pricing model (e.g., vendor catalogs that can be accessed by the public, reverse auctions).
- Significant savings in the overall cost of goods and services purchased through the adoption of Strategic Sourcing. These savings come primarily from organizations better leverage their purchasing power by combining contracts/purchases across the organization.
- Reduced paper printing and mailing costs due to the "paperless" environment.
- Improved purchasing policy compliance because rules are automated.
- Ability to utilize standard RFx templates increases compliance with state procurement policies.
- Ability to check funding availability if desired.



# **Change Management Concerns:**

- Standardization of Procurement Methods
- Empowering Agencies to procure goods and services
- Use of a Procurement modules to process documents other than ITB

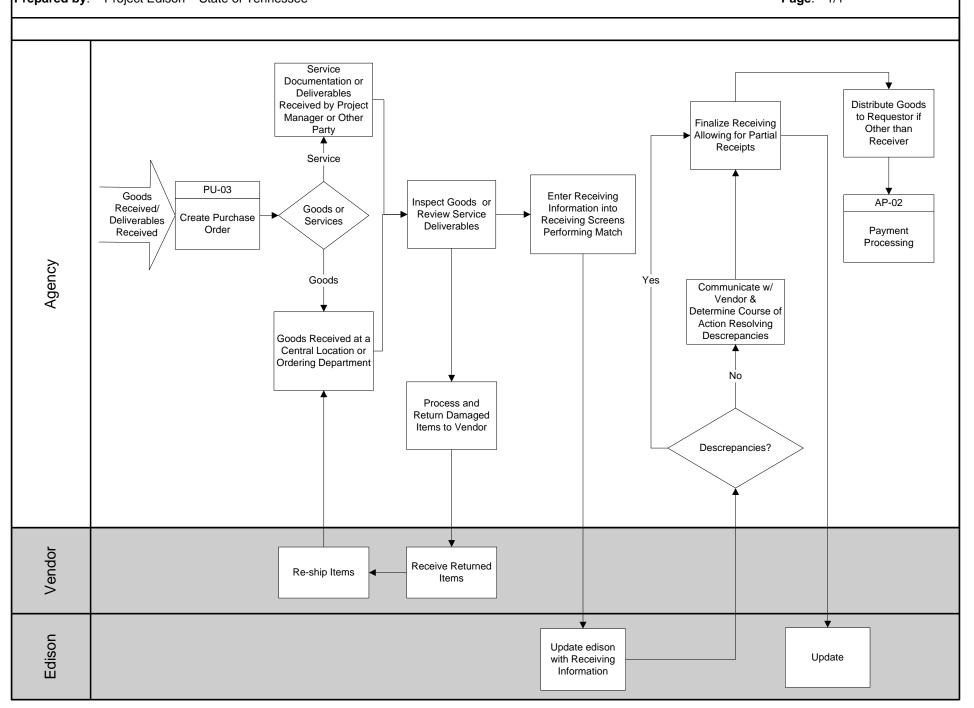
## **Communication Actions:**

- Explaining benefits of ERP
- Continued training of agency personnel

# **Eliminated Non-Core Systems:**

RFP Database AIMS PITS Process: Purchasing File: To Be PU-04 Receipt

Sub-Process:PU-04 Receipt of Goods and ServicesDate:10/21/05Prepared by:Project Edison – State of TennesseePage:1/1





Process Name: Purchasing	Process Identifier: PU
Sub-Process Name: Receipt of Goods or Services	Sub-Process Identifier: PU-04

Sub-Process Purpose and Objectives: To record the receipt of goods and/or services

**Sub-Process Description:** The process begins when goods have been received at either a central location or by the individual department ordering goods and/or services. In the case of services, the process begins when documentation, such as deliverables or timesheets, have been received by staff responsible for overseeing the provision of those services. It is very important to note that both goods and services will be procured and received in Edison. The process may also allow for both data-entered receipts and electronic receipts in the event a bar-coding receipt process is used.

Goods are inspected to determine if items are damaged. Damaged goods are prepared for return to the vendor. Service documentation is compiled and validated to ensure compliance with any contractual provisions. The receiver accesses edison and enters all receiving information, validating that the goods and services ordered were fully delivered according to specifications, terms and conditions or any other validation requirements currently residing in the Purchase Order. In the case of returns, online return forms may be generated, expediting the process. The process allows for partial receipt of goods or services which will allow partial payment if approved. If the goods received are inventory items, a put-away sheet may automatically be generated for warehouse personnel to put away the stock.

If items or services received do not match what was ordered, the receiver or purchaser will notify the vendor and resolve the issues. The receiver can receive partial shipments and Edison will maintain the open quantities until finally received. Upon resolution of any outstanding issues, the receiver finalizes the process, updating Edison and sending the goods to the requesting department.

### Sub-Process Trigger(s):

 This process is triggered by the receipt of goods or service

# **Key Sub-Process Participants:**

- Agency Procurement
- Vendor

#### Inputs:

Input	Format	Volume/Time	Suppliers
Invoices	Electronic/Paper	Approximately 1 million/Year	Vendors
Outputs:	_	_	_
Output	Format	Volume/Time	Recipients
PO & Contract Payments	Electronic/Paper	Approximately 1 Million	Agency Procurement
		Sequences/Year	Vendors



Process Name: Purchasing	Process Identifier: PU		
Sub-Process Name: Receipt of Goods or Services	Sub-Process Identifier: PU-04	Sub-Process Identifier: PU-04	
Performance Measures Tracked:			
Measure	Current Value	Target Value	



Change Beguired
Change Required (Yes/No)?
TBD

## **Key Assumptions:**

- All executive branch agencies will utilize Edison for procurements.
- The system will standardize the procurement process by streamlining and/or modifying existing processes.

# Improvements:

- View entire document on line; e.g., specifications, terms and conditions.
- Increased vendor access to bid opportunities through the use of "push" technology to notify vendors of bid opportunities (based on the commodities they are registered to provide) through industry-standard email applications.
- Reduced paper printing and mailing costs due to the "paperless" environment.
- Improved purchasing policy compliance because rules are automated.
- On-line receipt of goods by utilizing self-service receiving functionality through a web browser or kiosk.
- Improved vendor performance via tracking of historical performance.

improved vertical performance the additing of meterical performance.		
Change Management Concerns:	Communication Actions:	
Standardization of Procurement Methods.	<ul><li>Explaining benefits of ERP</li><li>Continued training of agency personnel</li></ul>	



Eliminated	Non-Core	Systems:
------------	----------	----------

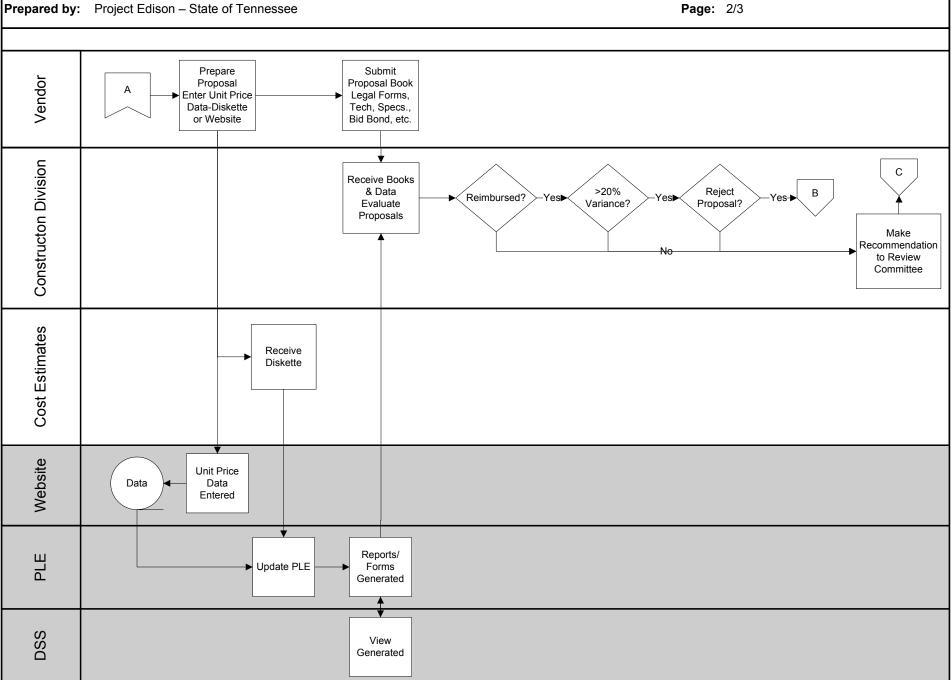
RFP Database AIMS

**PITS** 

To Be PU-05 Construction Contracts Purchasing File: Process: Sub-Process: PU-05 TDOT Construction Contracts **Date:** 10/21/05 Prepared by: Project Edison – State of Tennessee **Page:** 1/3 Submit Order for Proposal Vendor Book, Prequalified? -Yes Quantities, Plans No Constructon Division End Yes Prepare Quantities Post Proposal Import Data to Packet Extracted Proposal Book on Construction \ PES Submitted from Excel Book Website only Plans Timely? Estimates Prepare Cost Post Cost Construction \ Est. using Advertisement Plans Plan data and on Website & extracted qty's Newspapers Website В Post Proposal Advertisement **Book Posted** on Website & Newspapers PLE (PES, LAS, Expedite) Master Generate Update with **Updated Cost** Bid Item Advertisement . Qty Data Est. Data List Notice Excel Construction Data (qty) Access

Process: Purchasing To Be PU-05 Construction Contracts File:

Sub-Process: PU-05 TDOT Construction Contracts Date: 10/21/05 **Page:** 2/3



Process: Purchasing File: To Be PU-05 Construction Contracts Sub-Process: PU-05 TDOT Construction Contracts Date: 10/21/05 **Page:** 3/3 Prepared by: Project Edison – State of Tennessee Vendor Procure Bonding & Sign Contract Constructon Division Review Signed Receive Signed Contract & Update Contract and Prepare С 2 Contract Bonding Send Systems for Signature Review Committee Make Recommendation Submit List of Low Bidders Select Low Receive List of Award? Bid (or next Sign Contract -Yes-▶ Commissioner Low Bidders low bid) Νο ▼ echnicality Causing Rejection? PLE Update DSS Generate Update Forms Edison Update



Process Name: Purchasing	Process Identifier: PU
Sub-Process Name: TDOT Construction Contracts	Sub-Process Identifier: PU-05

Sub-Process Purpose and Objectives: To Engage a Vendor for a Construction Project

**Sub-Process Description**: The process begins with a need being identified to "let" a construction project out for bid. The construction plans are used to prepare cost estimates and quantities based on an Excel spreadsheet and input from a master bid item list in PLE system. PLE is the abbreviation for the three components of the bid letting system PES, LAS, and Expedite. The Cost/Estimates Department imports the data into the Preliminary Estimate System (PES) and the proposal book is generated using standardized specs and posted on the website. Any variance on the specs for the project is reviewed and adjusted manually. By law, TDOT is required to advertise a letting four weeks in advance. The advertisement for bid is posted in the local and/or regional newspaper and on the Web, and contains the unit quantities and the contractual requirements. Vendors need to be pre-qualified prior to purchasing a proposal book. This is verified at the time the order is placed. If pre-qualified, the vendor is sent a proposal book, the design plans, and a data diskette for entering the unit prices. If desired, the vendor can submit the proposal and enter their unit prices via a private website, which is maintained by a third party vendor, Bid Express. This site is locked to TDOT personnel to insure autonomy of the bid process. The data diskette and the unit prices from the website are imported into PLE/Letting Award System. Reports are generated and reviewed by both TDOT's DSS and the Construction Departments. By 10:00 A.M. on the morning of the Bid Letting, a hardcopy of the proposal is submitted along with the legal forms, technical specs, bid bonds, etc.

The Construction Division receives all proposal packages, and they are reviewed for completeness. The unit prices submitted are also evaluated to see if another government entity is involved (for reimbursement or costs to be paid) or, if there is a 20 percent variance in the Vendors' costs. If both conditions are met, the initial cost estimates and quantities are reviewed once again, and the project goes back through the letting process with any adjustments necessary. If all requirements are met and the evaluation passes inspection, a recommendation by the Construction Dept is made to the Review Committee to evaluate the proposals prior to awarding to the lowest bidder. The list of low bidders is submitted to the TDOT Commissioner to choose the Vendor. The DSS Department is notified of the status of all vendors on the list, whether or not they are awarded the project.

If The TDOT Commissioner selects the lowest bid, a contract is prepared, and the vendor is notified during the bid letting award meeting. The Vendor must procure bonding, sign the contract, and submit both to the Construction Division for review. The contract is routed to the Commissioner for approval. Once signed, the Construction Division updates PLE and a detailed transaction for every bid item is sent to edison.

If the TDOT Commissioner rejects the lowest bidder due to a technicality in the proposal (no signature, did not meet all requirements, etc), he can either award the project to the next lowest bidder or start over with the bid letting process.



Process Name: Purchasing		Process Identifier: PU	
Sub-Process Name: TDOT Co	nstruction Contracts	Sub-Process Identifier: PU-05	
Vendor work on a Constr	by the need to have a outside uction Project	<ul> <li>Key Sub-Process Participants</li> <li>TDOT Construction Divis</li> <li>TDOT Cost/Estimates</li> <li>TDOT Commissioner</li> <li>Vendors</li> <li>TDOT DSS Department</li> <li>TDOT Finance</li> <li>Bid Express</li> <li>edison</li> </ul>	
Inputs:			
Input	Format	Volume/Time	Suppliers
Excel spread sheet			TDOT Construction
PES/cost estimates	Electronic		TDOT Cost Estimate
Construction Plans	Cad/paper	700/Year	TDOT Design
Unit prices	Web		Vendor
Outputs:			
Output	Format	Volume/Time	Recipients
Proposal Book	Paper	700+/Year	Contractor
Advertisements Notices	Newspaper Web	700+/Year	Local newspapers
PLE forms	Paper		TDOT Division
DSS forms	Paper		TDOT Division
Diskette containing cost estimates	3.5 Floppy diskette	700/Year	Contractor
Construction contract	Paper	700/Year	TDOT Division/Contractor
Performance Measures Tracke	ed:		
Mea	sure	Approx. Value	Target Value



Process Name: Purchasing	Process Identifier: PU	
Sub-Process Name: TDOT Construction Contracts	Sub-Process Identifier: PU-05	
Sub-Flocess Name. The Construction Contracts	Sub-Frocess identifier. F 0-03	
Lawa Bandatiana and Balisiaa That Carrens Out Brosses		
Laws, Regulations, and Policies That Govern Sub-Process:		
TCA 54-5-113 through 54-5-119 Title 23 section 112		
	d Pridge Construction	
Section 101- 109 in the TDOT Standard Specification for Road and	a bridge Construction	
Current Sub-Process Issues/Problems:		
Improvement Opportunities: Training of Agency Procurement P		
Opportunity	Organizational Impacts	
Merge cells to link one Opportunity to multiple impacts)	(Individually list and describe laws [L] regulations [R], and	
	policies [P], as well as cultural [C] considerations for each	
	opportunity)	
Applications that Support the Sub-process:		
Application Name(s)	Technology Description	
(Internal name and vendor's name)	(Programming vendor, language, platform, database, etc.)	
TDOT STARS	STARS is a mainframe-based governmental accounting system	
	that was developed by KPMG. It is written in COBOL and uses	
	an IMS database.	
Construction Management System is composed of several	AASHTO The database structuse is Oracle based.	
modules: PES – Preliminary Estimate System, LAS Letting		
Award System, Expedite, and DSS – Decision Support System		